

TABLE IV — GEAR SET-UPS FOR METRIC THREADS

Certain metric threads require a special spacer, and an extra sleeve, bushing and bolt assembly, available at the Atlas factory.

Two of the standard change gears furnished with the Atlas Lathe, the 52 tooth gear and the 44 tooth gear, combine to give a ratio of 44/52 or .846154, which is an almost exact function of 2.54, the English to Metric ratio. Thus, it is possible to cut metric threads very close to the standard Metric pitches.

Refer to page 119 when cutting metric threads.

Pitch mm.	Screw	Position C		Position B		Position A		Note
		B	F	B	F	B	F	
.5	96B	24	56	40	44	64I	20S	*
.75	44B	24	40	xxS	64I	96	52	*
1.0	44B	32	40	xxS	64I	96	52	*
1.25	44B	—	—	64I	xxS	52	96	
1.5	44B	24	48	40	52	64I	20S	*
1.75	44B	56	40	xxS	64I	96	52	*‡
2.0	40B	24	44	36	52	64I	20S	*
2.5	44B	52	48	—	—	20S	96I	
3.0	44B	52	40	—	—	20S	96I	
3.5	44B	56	48	40	52	64I	20S	*
4.0	40B	48	44	36	52	64I	20S	*
4.5	40B	54	44	36	52	64I	20S	*
5.0	24B	52	44	—	—	20S	96I	
5.5	20B	52	48	—	—	24S	96I	
6.0	20B	52	44	—	—	24S	96I	
7.0	24B	52	44	40	56	64I	20S	*

SYMBOLS:

- *—extra sleeve, bushing and bolt assembly
- xx—spacer made by turning down a 20 tooth gear to an outside diameter of 1-1/16 inch
- ‡—extend slot at position A about 1/16 inch (by filing)
- F—position away from headstock
- B—position toward headstock
- I—idler gear (page 98)
- S—spacer gear (page 98)